

What is claimed is:

1. A method for removing a vapor-phase contaminant from a contaminated gas stream in a duct, said method comprising:
 - 5 adsorbing fresh sorbent onto the surface of a sorbent structure positioned inside said duct;
 - passing said contaminated gas stream over said fresh sorbent structure so that said vapor-phase contaminant is adsorbed by said fresh sorbent until saturated sorbent is produced;
 - 10 periodically removing said saturated sorbent from said sorbent structure and collecting said saturated sorbent outside of said duct; and
 - repeating said adsorbing step with a new quantity of fresh sorbent.
2. The method of Claim 1 wherein said adsorbing additionally comprises:
 - 15 injecting said fresh sorbent into said contaminated gas stream prior to said passing.
3. The method of Claim 1 wherein said adsorbing is carried out prior to placing said sorbent structure inside said duct.
- 20 4. The method of Claim 1 wherein said vapor-phase contaminant comprises at least one substance containing mercury.
5. An apparatus for removing a vapor-phase contaminant from a contaminated gas stream in a duct, said apparatus comprising:
 - 25 at least one sorbent structure;
 - a means for adsorbing fresh sorbent onto said sorbent structure;
 - a means for passing said contaminated gas over said sorbent structure to produce saturated sorbent; and
 - 30 a means for removing and collecting said saturated sorbent.

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